

# Rhodora

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## AN OVERLOOKED SPECIES OF CORAL-ROOT FROM THE ROCKY MOUNTAINS

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THROUGH the kind coöperation of Dr. Aven Nelson we were enabled to visit, in the summer of 1929, the Medicine Bow Range, Wyoming. On one of our excursions in search of orchids we came across several scattered colonies of a Coral-root which we immediately recognized as different from any other species known to us. Studies in the Rocky Mountain Herbarium of the University of Wyoming (Laramie) revealed the fact that the plant had heretofore been referred to the European *Corallorrhiza trifida* Chat., a species with which we are thoroughly familiar in nature and which we had collected in large numbers the year before in Germany and Switzerland.<sup>1</sup> Prof. T. D. A. Cockerell<sup>2</sup> apparently was the first to notice its distinctness from the Old World plant, but in the absence of European material, he had to rely on published descriptions, and provisionally separated the Colorado form as a subspecies under the name *C. corallorrhiza coloradensis*. The differences between the two plants are, however, such as to suggest specific distinctness.

The Rocky Mountain plant may, accordingly, be described as:

**CORALLORRHIZA wyomingensis**, n. sp., caulibus gracilibus 10–16 cm. altis, infra medium 2 vel rare 3 bracteis vaginantibus onustis; floribus in racemum laxum 9–12-florum dispositis; bracteis minutis triangularibus obtusis; ovario pedicellato torto perianthio erecto longiore; planta tota pallide lutea, floribus laete luteis, labello albo; sepalis lateralibus lineari-lanceolatis plus minusve patentibus et juxta labellum deflexis, 6–7 mm. longis; sepalis superioribus brevioribus

<sup>1</sup> This summer (1930) we again had an opportunity of studying numerous fresh plants in the Bavarian Alps.

<sup>2</sup> Torrey, xvi, 1916, p. 231.



lterioribusque supra columnam productis; petalis breviter subacutis vel obtusis ca. 5 mm. longis et 1.5 mm. latis sepalis superioribus paullo brevioribus; labello late oblongo basi angustato apice truncato, parte apicali deflexa et undulato-marginata; lobis lateralibus minutis denticuliformibus; calcare obsoleto vel obscuro; columna longiuscula et gracili prope medium attenuata prorsum valde curvata; clinandrio leviter scrobiculiformi minuto.

Stem slender, 10 to 16 cm. high with two, rarely three, sheathing scales on basal half; flowering spike a loose raceme of from 9 to 16 flowers; bracts minute, triangular, obtuse; ovary pedicelled, twisted, longer than the erect perianth; whole plant light yellow, flowers brighter, the lip pure white; lateral sepals linear-lanceolate, somewhat spreading and deflected at sides of lip, 6 to 7 mm. long; upper sepals shorter and broader, roofing over the column; petals briefly subacute or obtuse, about 5 mm. long and 1.5 mm. wide, slightly shorter than upper sepals; lip broad-oblong, narrowed at base, truncate at tip, with apical half deflexed and wavy-edged; lateral lobes exceedingly small, tooth-like; no trace of a spur, at best suggested by a faint swelling; column fairly long and slender, attenuated in the middle, strongly bent forward; clinandrium a small, slight depression.

TYPE from Libby Creek (alt. 7000 ft.), near Libby Lodge, Medicine Bow Range, Wyoming, July 17, 1929 (*C. E. and K. J. Hellmayr*, No. 72).

Geographical Distribution.—Rocky Mountains, WYOMING: Libby Creek, near Libby Lodge (*C. E. and K. J. Hellmayr*, July 17, 1929); Jackson Creek (July 7; Rocky Mountain Herbarium, University of Wyoming); Horse Creek, seven miles west of Merna, Sublette County (July 16, 1922; Rocky Mountain Herbarium).

*C. wyomingensis* is nearly related to *Corallorrhiza trifida*; but the flowers are markedly larger, the column is slenderer and more strongly curved, and the lateral lobes of the lip, so conspicuous in its ally, are barely suggested. Besides, the coloration is quite different, the entire plant being light yellow, with the wholly unmarked lip in abrupt contrast pure white. *Corallorrhiza trifida* is purplish or brownish green, the sepals and petals are tipped with purplish, and the trilobed lip is dotted or streaked with bright purple, this color also encroaching on the top of the column. Twenty-five specimens of *C. wyomingensis* examined on the spot were perfectly alike in coloring and did not show any variation. In the majority, there was no trace of a spur, though a very slight swelling was noticeable in a few plants. The plants were found growing in small colonies among moss and lichens on the very edge of the creek in shady woods.

There is little doubt that the plant described by Cockerell from near



Long's Peak Inn, Larimer County, Colorado, is specifically identical with *C. wyomingensis*, though certain peculiarities, such as the pale orange-tinted sepals and the whitish (not pure white) lip, seem to indicate that *coloradensis* might be separable as a variety. On the other hand, it is quite possible that *C. innata* var. *virescens* Farr,<sup>1</sup> based on specimens from Banff, Alberta, and Field, British Columbia, may be referable to *C. wyomingensis*.

It may be well to consider in this connection the possible relationship of our plant to *C. vancouveriana* Finet,<sup>2</sup> regarded by Prof. Oakes Ames<sup>3</sup> as synonymous with *C. trifida*. Thanks to the courtesy of Prof. Lecomte and his associates, we were enabled, this summer, to examine the type sheet and Finet's original drawings in the Herbarium of the Muséum d'Histoire Naturelle, at Paris. While the two specimens on the sheet are not in very good condition, two of the five flowers of the larger plant are fully developed, and permit a close scrutiny of their structure. As correctly described by Finet, the plant possesses a *very conspicuous exposed* spur; besides, the lateral lobes of the lip are much larger and much more divaricate, and its margin is much less crenulate than in *C. trifida*. There can be no doubt that *C. vancouveriana* is totally different from both *C. trifida* and *C. wyomingensis*. On the other hand, it is so close to certain Mexican species that one is tempted to question the correctness of the locality. The sheet was presented by Sir W. Hooker, in 1855, and the original label reads: "I. Vancouver. Garry, May, 1826."

To Dr. Paul Standley we are much indebted for looking over the manuscript and for supplying the Latin diagnosis.

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CLADONIAS COLLECTED BY S. F. BLAKE  
IN THE WESTERN UNITED STATES<sup>4</sup>

C. A. ROBBINS

(Plate 209)

DURING the summer of 1927 Dr. S. F. Blake collected Cladonias from several localities<sup>5</sup> in the Pacific Coast States and also from

<sup>1</sup> Contrib. Bot. Lab. Univ. Penns., 2, 1904, p. 425.

<sup>2</sup> Bull. Soc. Bot. France, 56, 1909, p. 100, pl. 1, figs. 38-43.

<sup>3</sup> An Enumeration of the Orchids of the United States and Canada, 1924, p. 24.

<sup>4</sup> Mr. C. A. Robbins died on 22 Jan. 1930. This paper was left by him so nearly complete that it has been possible to prepare it for publication without material